What is claimed is:

1. A centrifugal blower assembly comprising:

a centrifugal impeller adapted to receive air axially and discharge the same radially;

an electric motor connected in driving relationship with the impeller;

a scroll diffuser defining at least one axial inlet opening for supplying air to the impeller, and at least one scroll section for collecting and discharging air from the impeller, and

at least one partition extending substantially in a radial plane mounted within the housing with an inner opening receiving and having an edge in close proximity to the periphery of the centrifugal impeller, said partition serving to divide the scroll interior into at least two discrete axially adjacent flows for the discharge of air from the scroll section.

2. A centrifugal blower assembly as set forth in Claim 1, wherein said scroll section comprises at least two discrete scroll sub-sections associated respectively with said at least two axially adjacent flows.

3. A centrifugal blower assembly as set forth in Claim 2, wherein each of said at least two scroll sub-sections is configured to provide an independently optimized expansion rate.

4. A centrifugal blower assembly as set forth in Claim 2, wherein said at least two scroll sub-sections have differing configurations of their outer walls, each spaced radially from but facing the periphery of the impeller.

5. A centrifugal blower assembly as set forth in Claim 2, wherein the axial dimension of at least one of said at least two scroll sub-sections varies as the air proceeds from the impeller to an associated discharge opening.

6. A centrifugal blower assembly as set forth in Claim 5, wherein the manner in which the axial dimensions of said two sub-sections varies is different.

7. A centrifugal blower assembly as set forth in Claim 2, wherein the centerlines of the flows through the sub-sections differ.

8. A centrifugal blower assembly as set forth in Claim 4, wherein the discharge openings of the two sub-sections are substantially rectangular in cross section and are arranged in adjacent end-to-end relationship to provide an elongated discharge opening.

9. A centrifugal blower assembly as set forth in Claim 4, wherein the discharge openings of the two sub-sections are arranged in adjacent side-by-side relationship to provide an aggregate discharge opening of substantially enlarged width.

10. A centrifugal blower assembly as set forth in Claim 4, wherein the discharge openings of the two sub-sections are arranged in angularly spaced apart relationship.

11. A centrifugal blower assembly as set forth in Claim 8, wherein the scroll sub-sections are configured with varying axial dimensions and at least one sub-section is displaced axially as it approaches its discharge opening to provide for an aggregate elongated discharge opening having substantially a common longitudinal centerline.

12. A centrifugal blower assembly as set forth in Claim 2, wherein said at least two scroll sub-sections have cut-off points substantially at the same point circumferentially along the periphery of the impeller opening in the partition.

13. A centrifugal blower assembly as set forth in Claim 2, wherein said at least two scroll sub-sections have cut-off points spaced circumferentially from each other.

14. A centrifugal blower assembly as set forth in Claim 2, wherein said at least two scroll subsections have discharge openings with substantially parallel centerlines.

15. A centrifugal blower assembly as set forth in Claim 2, wherein said at least two scroll sub-sections have discharge openings with centerlines angularly related to each other.

16. A centrifugal blower assembly as set forth in Claim 1, wherein said edge of said inner opening in said partition takes a thin rounded configuration facing the impeller.

17. A centrifugal blower assembly as set forth in Claim 16, wherein said edge is inclined gradually outwardly on opposite sides from said rounded configuration to the full thickness of the partition.

18. A low profile centrifugal impeller assembly comprising:

a centrifugal impeller adapted to receive air axially and discharge the same radially; said impeller comprising a back plate with a radially outwardly disposed annular portion extending substantially in a radial plane, and

a plurality of substantially axially extending parallel air moving blades spaced circumferentially and having one end portion mounted on said outwardly disposed annular portion of the back plate,

a radially inwardly disposed portion of the back plate having a cup-shaped configuration and extending axially within the outer back plate portion

in a cylindrical opening defined by the air moving blades thereon, and

at least a permanent magnet portion of an electric motor for driving the impeller disposed within the cup-shaped radially inner portion of the back plate;

a housing defining at least one axial inlet opening for supplying air to the impeller and at least one scroll section for collecting and discharging air from the impeller.

19. A centrifugal blower assembly as set forth in Claim 18, wherein the depth of said cup-shaped back plate portion is at least equal to the length of the air moving blades.

20. A centrifugal blower assembly as set forth in Claim 19, wherein said back plate is constructed of a molded thermoplastic.

21. A centrifugal blower assembly as set forth in Claim 1, wherein a flow balancing restriction is incorporated in at least one of said scroll sub-sections.